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EXAMINER

FIGUEROA, MARISOL

ART UNIT PAPER NUMBER

2617

DATE MAILED: 11/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/736,135

Applicant(s)

CREAMER ET AL.

Examiner

Marisol Figueroa

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9/5/2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 11-45 and 47-59 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-9, 11-19, 22, 23, 31-34, 36-45, 47-55, 58 and 59 is/are allowed.
- 6) ☒ Claim(s) 20, 21, 24-30, 35 and 56-57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/15/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Action is in response to Applicant's amendment filed on September 5, 2006. The Applicant amended claims 1, 7, 13, 15, 20, 22, 24, 37, 43, 49, 51, and 58, previously canceled claims 10 and 46. Accordingly, claims 1-9, 11-45, and 47-59 are currently pending in the present application.

Response to Arguments

2. Applicant's arguments with respect to claims 20, 24, 35, and 56 have been considered but are moot in view of the new ground(s) of rejection.

3. Applicant's arguments, see pages 21-23 of the remarks filed on 9/5/2006, with respect to claims 1, 7, 13, 15, 22, 31-34, 36-37, 43, 49, 51, and 58 have been fully considered and are persuasive. The previous rejections have been withdrawn.

Claim Objections

4. **Claims 24 and 48** are objected to because of the following informalities:

(a) On line 15 of claim 24; insert an --s-- at the end of the word device, and on line 16; insert the word --data-- before the word "base".

(b) Claim 48 should apparently depend on claim "43" instead of claim "46" as claimed, for given that claim "46" was canceled. Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 24, 29, and 30** are rejected under 35 U.S.C. 103(a) as being unpatentable over Sundar et al. (US 2003/0134636 A1) in views of Khartabil et al (US 2004/0249891 A1), Bell (US 2002/0049073 A1), and Nevermann (US 2003/0064761 A1).

Regarding claim 24, Sundar discloses a system for roaming between a cellular network and a wireless network comprising:

an access point configured to wirelessly communicate with devices and facilitate communications over the Internet (Fig. 15, WLAN 200 has a plurality of access points linked to IP ;

a gateway configured as an interface between the Internet and the cellular network (Fig. 15, WLAN MSC 302);

a mobile data base station configured to communicate with mobile communications devices over a cellular voice channel of the cellular network (Fig. 15, BTS); and

a mobile switching center configured to route cellular calls and link said mobile data base station with said gateway (Fig. 15, WWAN MSC 110);

wherein said gateway and said mobile switching center work cooperatively to switch calls between the cellular network and the wireless network via the Internet (p.0083-0084).

Sundar fails to disclose a Session Initiation Protocol proxy server configured to perform call routing over the Internet and wherein calls over the Internet are managed by said Session Initiation Protocol proxy server. Khartabil teaches that, a proxy server is used to create SIP sessions such as Internet telephone calls, multimedia distribution, and multimedia conferences (p.0004). Therefore, it would have been obvious to one having ordinary skill in the art to include a SIP proxy server in the

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system, because a proxy server assists with the establishment of Internet sessions as taught by Khartabil.

The combination of Sundar and does not expressly disclose wherein said devices are configured to operate to attenuate a signal conveyed to the mobile data base station in response to detecting a wireless access point.

However, Bell teaches a method of handover of a cellular call in progress to a cordless network. When the handset (i.e., devices) detects that is within the range of a cordless base station/cheaper service (i.e., wireless access point) and upon user acceptance, the handset drops the current cellular call and the call is established using the cordless base station (Fig. 5; p.0044-0046).

Bell does not expressly disclose that the handset attenuates the signal to drop the cellular call, Nevermann teaches a mobile communication device that reduces the energy radiated by the mobile communication device when is in proximity to a body, in which the power level of the signal is reduced to maintain a proper specific absorption rate, and might be reduced regardless of signal strength which causes the wireless communication link to be dropped (abstract; p.0046).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, wherein the devices are configured to operate to attenuate a signal conveyed to the mobile data base station in response to detecting a wireless access point (note that the combination of Bell and Nevermann will produce this), as suggested by Bell and Nevermann, in order to drop calls connected through the cellular network when the wireless access point service (i.e., cordless service) becomes available since it might be cheaper than the cellular service and preferred by the user.

Regarding claim 29, the combination of Sundar, Khartabil, Bell, and Nevermann disclose the system of claim 24, wherein said gateway further is configured to function as an interface to the

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public switched telephone network (Fig. 15; WLAN MSC 302, i.e. gateway interfaces with the PSTN network).

Regarding claim 30, the combination of Sundar, Khartabil, Bell, and Nevermann disclose the system of claim 24, Sundar discloses wherein a call has been established over the wireless network using a streaming session (p.0077, lines 1-8; the mobile station is engaged in a call with the WLAN network), wherein said gateway terminates the streaming session and transfers the call to said mobile switching center, said mobile switching center routing the call to said mobile data base station (p.0078; the handoff of the ongoing call is made from the WLAN to the WAN, when the MS enters a WWAN, it is inherent that the ongoing communication with the WLAN is terminated when the handover occurs to the WWAN).

7. **Claim 25** is rejected under 35 U.S.C. 103(a) as being unpatentable over Sundar et al. in views of Khartabil et al., Bell, and Nevermann, and further in view of Ibe et al. (US 2004/0087307 A1).

Regarding claim 25, the combination of Sundar, Khartabil, Bell, and Nevermann disclose the system of claim 24, Sundar discloses wherein a call has been established over a voice channel of the cellular network (p.0083, lines 1-3), wherein said gateway receives an invite formatted using Session Initiation Protocol from a mobile communications device having detected the wireless network (p.0084, lines 10-13; Fig. 20, SIP INVITE). Sundar does not expressly disclose that the system authenticates a Session Initiation Protocol client operating in the mobile communications device. Ibe discloses a method of seamless roaming between wireless local area networks and cellular carrier networks (abstract, lines 1-6) and teaches that when a mobile device happens to be on a WLAN goes through an initialization process in which the mobile device sends a registration message to an authentication server that authenticates the mobile device (p.0017, lines 1-8). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the

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invention to authenticate the mobile communications device over the wireless network as taught by Ibe, since it is part of an initialization process the mobile device has to go through in order to be authorized to receive service from the wireless network.

8. **Claim 26** is rejected under 35 U.S.C. 103(a) as being unpatentable over Sundar et al. in views of Khartabil et al., Bell, Nevermann, and Ibe et al. and, further in view of Chaskar et al. (US 2004/0090937).

Regarding claim 26, the combination of Sundar, Khartabil, Bell, Nevermann, and Ibe disclose the system of claim 25, Sundar discloses wherein said gateway acknowledges the session initiation protocol invite (p.0084, lines 13-14; Fig. 20, SIP 200 OK). However does not expressly disclose to initiate an Internet Protocol streaming session to the mobile communications device. Chaskar teaches that a user while in the coverage area of a WLAN can initiate an Internet session such as a voice over IP (VoIP) call or a multimedia conferencing call (p.0020, lines 1-6). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to setting up an Internet Protocol streaming session over the Internet to the mobile communications device as taught by Chaskar, because a wireless network, i.e. WLAN, support the initiation of Internet sessions.

9. **Claims 27-28** are rejected under 35 U.S.C. 103(a) as being unpatentable over Sundar et al. in views of Khartabil et al., Bell, Nevermann, Ibe et al., Chaskar et al., Fors et al., and Roach Jr. (US 5,845,211).

Regarding claims 27 and 28, the combination of Sundar, Khartabil, Bell, Nevermann, Ibe and Chaskar disclose the system of claim 26, but does not expressly disclose wherein said mobile switching center handoffs a cellular call to another mobile data base station upon detecting reduced signal power from the mobile communications device and said gateway signals said mobile switching

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center that a signal of sufficient power has been received via the wireless network, and further wherein said mobile switching center switches the call from the mobile data base station to the gateway. Roach teaches that in conventional wireless cellular networks call handoff are handled by MSCs and occurs when the wireless system determines a handoff is desirable when a first base station senses a signal below a predetermined threshold and the call is handed off from an original base station to another (col.1, line 47- col.2, lines 1-12) and further the mobile switching center switches the call from the mobile data base station to the gateway (p.0033). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention for a mobile switching center to handoff a cellular call to another base station when detecting a reduced signal power from the mobile communication device as suggested by Roach, because it is a common functionality of the mobile switching center to handoff calls to another base station if a signal quality in the current base station is degraded.

However, Sundar, Khartabil, Ibe, Chaskar, and Roach fail to disclose wherein said gateway signals said mobile switching center that a signal of sufficient power has been received via the wireless network. Fors discloses a method for handoff from a cellular wireless network to a non-cellular wireless network, e.g. WLAN, and describes access gateways that enable such handoffs (abstract, lines 1-5). As a mobile station moves within the coverage area of the WLAN, the MS performs signal strength measurements and at some point determines that a handoff from serving BS to AP, i.e. wireless network. The processor sends a handing request to CAG, i.e. cellular access gateway, and it sends handoff request, i.e. indication of signal with sufficient power from wireless network, to the MSC to trigger inter-MSC handoff procedures. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention for a gateway to signal said mobile switching center that a signal of sufficient power has been received via the wireless

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network as suggested by Fors, in order for the MSC to initiate the handoff procedures of a call from a cellular to a wireless network.

10. **Claims 20, 21, 35, 56, and 57** are rejected under 35 U.S.C. 103(a) as being unpatentable over Sundar et al. (US 2003/0134636 A1) in view of Bell, and Nevermann.

Regarding claim 20, Sundar discloses a method of roaming between a cellular network and a wireless network comprising the steps of:

during an established call over the wireless network, detecting the cellular network; establishing a communications link with a mobile data base station of the cellular network, such that a streaming session in the wireless network over which the call is conducted is terminated, the termination being caused in response to the mobile communications device determining when to terminate the streaming session; and continuing the call over a voice channel of the cellular network (p.0077, lines 1-5; p.0078, lines 1-7; when the mobile station engaged in a telephone call through the WLAN and roams to the cellular network, it detects a signal from the cellular network and if the signal strength is stronger than the signal from WLAN, the mobile station determines that handoff is necessary (i.e., determines when to terminate the session) and initiates a handover process that transfers the current call to the cellular network, therefore, terminating the link with the WLAN).

Sundar does not expressly disclose wherein the streaming session is terminated by attenuating signals transmitted from the mobile communications device to the wireless network.

However, Bell teaches a method of handover of a cellular in progress to a cordless network or vice-versa. When the handset (i.e., devices) detects that is within the range of a cordless base station/cheaper service (i.e., wireless access point) and upon user acceptance, the handset drops the

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current cellular call (i.e., terminates session) and the call is established using the cordless base station (Fig. 5; p.0044-0046).

Bell does not expressly disclose that the handset attenuates the signal to drop the cellular call, Nevermann teaches a mobile communication device that reduces the energy radiated by the mobile communication device when is in proximity to a body, in which the power level of the signal is reduced to maintain a proper specific absorption rate, and might be reduced regardless of signal strength which causes the wireless communication link to be dropped (abstract; p.0046).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, wherein the streaming session is terminated by attenuating signals transmitted from the mobile communications device to the wireless network (note that the combination of Bell and Nevermann will produce this), as suggested by Bell and Nevermann, in order to drop the streaming session when cellular network becomes available since it might be preferred by the user to establish calls.

Regarding claim 21, the combination of Sundar, Bell, and Nevermann disclose the method of claim 20, Sundar discloses wherein the wireless network is configured according to at least one of the 802.11, 802.15.3, or 802.16 communications protocols (p.0021, lines 1-7).

Regarding claims 56 and 57, the claims are rejected over the same reasons stated about claims 20 and 21 accordingly, as they recite the same limitations of claims 20 and 21. See remarks about claims 20 and 21 above.

Regarding claim 35, Sundar discloses a system for roaming between a cellular network and a wireless network comprising: means for detecting the cellular network during an established call over the wireless network (p.0073; p.0077, lines 1-5); means for establishing a communications link with a mobile data base station of the cellular network (p.0073; WWAN air interface protocol), such

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that a streaming session in the wireless network over which the call is conducted is terminated; and means for continuing the call over a voice channel of the cellular network (p.0078, lines 1-7; when the mobile station engaged in a telephone call through the WLAN and roams to the cellular network, it detects a signal from the cellular network and if the signal strength is stronger than the signal from WLAN, the mobile station have means to initiate a handover that transfers the current call to the cellular network).

Sundar does not expressly disclose wherein said means for establishing comprising a means within a mobile communications device for causing said mobile communications device to attenuate a signal transmitted from said mobile communications device to the wireless network.

However, Bell teaches a method of handover of a cellular in progress to a cordless network or vice-versa. When the handset (i.e., devices) detects that is within the range of a cordless base station/cheaper service (i.e., wireless access point) and upon user acceptance, the handset drops the current cellular call (i.e., terminates session) and the call is established using the cordless base station (Fig. 5; p.0044-0046).

Bell does not expressly disclose that the handset attenuates the signal to drop the cellular call, Nevermann teaches a mobile communication device that reduces the energy radiated by the mobile communication device when is in proximity to a body, in which the power level of the signal is reduced to maintain a proper specific absorption rate, and might be reduced regardless of signal strength which causes the wireless communication link to be dropped (abstract; p.0046).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, wherein the means for establishing comprising a means within a mobile communications device for causing said mobile communications device to attenuate a signal transmitted from said mobile communications device to the wireless network (note that the

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combination of Bell and Nevermann will produce this), as suggested by Bell and Nevermann, in order to drop the streaming session when cellular network becomes available since it might be preferred by the user to establish calls.

Allowable Subject Matter

11. Claims 1-19, 22-23, 31-34, 36-45, 47-55, and 58-59 are allowed.

Prior Art of Record

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(a) VERMA et al. (US 6,725,044 B2) – Technique seamless handoff of a mobile terminal user from a wireless telephony network to a wireless LAN.

(b) KALLIO (US 2002/0147008 A1) – GSM networks and solutions for providing seamless mobility between GSM networks and different radio networks.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marisol Figueroa whose telephone number is (571) 272-7840. The examiner can normally be reached on Monday Thru Friday 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester G. Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Art Unit 2617

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